BOOKS AND PERIODICALS.

The Use of the Slede Rule. By F. A. Halsey, Associate Editor "American Machinist," Consulting Engineer Rand Drill Co. 16mo. 84 pages. Price, 50 cents. New York : D. Van Nostrand Co.

In this little book the author has set forth very clearly the use of the Slede Rule and has thus rendered valuable service to the practical computer. B. F. F.

Grammar School. Algebra. By William J. Milne, Ph. D., LL. D., President of New York State Normal College, Albany, N. Y. 154 pages. Price, 50 cents. 1899. New York, Cincinnati, and Chicago : American Book Company.

This book is characterized by the same methods of presentation exemplified in the other books of Dr. Milne's series. It will meet with hearty approval. J. M. C.

Standard School Algebra. By George E. Atwood. 432 pages. Price, $1.20. 1898. New York : The Morse Company.

This book is designed for use in high schools, and academies, and advanced classes in grammar schools. The definitions, demonstration of principles, derivation of rules, model solutions, and illustrations, occupy the last half of the book, and the exercises and problems in the first half. This arrangement may commend itself to many, but we fail to see any real advantage to be gained by reducing the first part of the book to a bare collection of exercises and problems. In other respects the book is highly satisfactory. The second part is marked by a clearness and conciseness in definitions, careful demonstration of principles, and an abundance of illustrations and model solutions. The book satisfactorily meets the requirements of what is best in the science and method of teaching elementary algebra at the present time. J. M. C.

La Mathématique Philosophie—Enseignement. Par C. A. Laisant, Répétiteur a L'École Polytechnique Docteur és Sciences. 8vo. Cloth, 292 pages. Price, $1.25. Paris : Georges Carré et C. Naud.

In this work the author has considered the philosophy and teaching of mathematics in a way so as to be of service not only to the student of mathematics, but to teachers as well. In No. 4, Vol. V, of the MONTHLY, Dr. Alexander Macfarlane contributed some remarks *in extenso*, from this book. Professor Laisant, in the remarks referred to, says that during the last twenty-five years, few countries have made greater progress in mathematics than the United States. This remark some of our readers considered a jest on the part of the author. But such is not the case. The book is from first to last a most carefully and sincerely written work, intended to be of the highest service to students and teachers of mathematics. The book is divided into three parts :. The first part discusses the philosophy of Pure Mathematics ; the second part discusses the philosophy of Applied Mathematics ; and the third part treats of the Instruction in Mathematics. The first part contains eight chapters, the first of which has to do with Mathematics and its subdivisions ; the second with Arithmetic and the Theory of Numbers, or Arithmologie ; the third, Algebra ; the fourth, the Infinitesimal Calculus ; the fifth, Theory of Functions ; the sixth, Geometry ; the seventh, Analytical Geometry ; the eighth, Rational Mechanics. In the second part, chapter 1 is devoted to general considerations ; chapter 2, to Applications of the Calculus ; chapter 3, to Applications of Geometry ; chapter 4, to Applications of Mechanics. In the third part, chapter 1 is devoted to a General View on the Teaching of Mathematics ; chapter 2, Teaching of Arithmetic ; chapter 3, Teaching of Algebra and the Advanced Calculus ; chapter 4, Teaching of Geometry ; chapter 5, teaching of Analytical Geometry ; chapter 6, Teaching of Mechanics ; chapter 7, The Hierarchy of Teaching. B. F. F.

A Short Table of Integrals. Revised Edition. By Benj. Osgood Peirce, Ph. D., Hollis Professor of Mathematics and Natural Philosophy in Harvard University. 8vo. Cloth, 134 pages. Price, $1.00. Boston : Ginn & Co.

This little book in its revised and enlarged form, contains nearly all the integrals commonly needed by students of the elements of the integral calculus in American colleges. A number of pages of auxiliary formulas, involving trigonometric, hyperbolic, and elliptic functions, and useful in transforming and interpreting integrals, have been added, with a few numerical tables in which are given, though in fine type, the four-place logarithms of natural numbers and of the trigonometric functions, the values of the hyperbolic functions, etc. This book will qe found very serviceable to use with any text-book.

<div align="right">J. M. O.</div>

The United States Sinking-Fund. By Theodore L. DeLand, Office of the Secretary of the Treasury, Washington. 1899.

We are indebted to Mr. DeLand for a copy of his solution, equation $u_{x+1}-u_x$ $=r_1 (a-u_x)+ru_x$, from advance sheets of Vol. II., No. 12, of the *Mathematical Magazine.*

<div align="right">J. M. O.</div>

Observational Geometry. By William T. Campbell, A. M., Instructor in Mathematics in the Boston Latin School. With an Introduction by Andrew W. Phillips, Ph. D., Professor of Mathematics in Yale University. Over 300 Illustrations and Diagrams. 8vo., 240 pages. New York and London : Harper & Brothers. 1899.

The reasoning required in this book depends on direct observation and the measurement of geometric figures constructed by the pupils themselves. Part I. treats of elementary forms, beginning with the cube, and introduces at once the ideas of precision and accuracy. Part II. takes up geometric forms in a more minute manner, developing the ideas of arrangement, order, and symmetry. The matter has been skilfully and clearly presented, the illustations are exceedingly helpful, and the book in all its details seems to have been carefully and honestly written. As an introduction to the study of geometry for pupils of the upper grammar grades, it is perhaps the best book that has yet appeared.

<div align="right">J. M. O.</div>

The Story of the Philippines and Our New Possessions, Including the Ladrones, Hawaii, Cuba, and Porto Rico. By Murat Halsted. Sold by the Dominion Co., Chicago, Ill.

This book is beautifully illustrated with half-tone engravings from photographs, etchings from special drawings, etc. The book is nicely bound, and there is a great demand for it, it being written by one of our ablest journalists.   B. F. F.

The following periodicals have been received : *The American Journal of Mathematics,* October, 1899 ; *The Educational Times,* October 1, 1899 ; *Journal de Mathématiques Élémentaires,* 15 October, 1899 ; *The Monist,* October, 1899 ; *Bulletin of the American Mathematical Society,* July, 1899 ; *L'Intermédiaire des Mathématiciens,* Juillet, 1899 ; *The Kansas University Quarterly,* April, 1899 ; *The Mathematical Gazette,* June, 1899 ; *Mathematisch-naturwissenschaftliche Mitteilungen,* Oktober, *Herausgegeben* von Dr. O. Böklen and Dr. E. Wölffing, Stutgart, Germany.